



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,856	05/04/2001	Masafumi Takiguchi	450100-03207	9840
20999	7590	04/20/2006	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			DUNN, MISHAWN N	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/849,856	Applicant(s) TAKIGUCHI ET AL.	
	Examiner Mishawn N. Dunn	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/24/2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 02/24/2006 have been fully considered but they are not persuasive.

Applicant argues that the data reproduction system of Shim et al. do not define the newly added limitation, "a phase of a clock generated by the phase-locked loop means is locked to the playback signal, wherein said phase-locked loop means generates a detection signal indicating whether the phase of said clock is locked to the playback signal."

In response, the examiner respectfully disagrees. Shim discloses in col. 5, lines 31-56 that PLLOCK, a clock synchronization signal out put from PLL 23, detects whether the phase of the clock is locked to the playback signal. If PLLOCK indicates that data is not synchronized with the clock, then the counter 622 in the ADTGC 28 stops a count operation and stabilizes the operation of the circuit. Thus, Shim does

Art Unit: 2621

indeed disclose the claimed, "a phase of a clock generated by the phase-locked loop means is locked to the playback signal, wherein said phase-locked loop means generates a detection signal indicating whether the phase of said clock is locked to the playback signal."

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seki et al. (US Pat. No. 5,450,253) in view of Shim et al. (US Pat. No. 6,307,822).

6. Regarding claim 1, Seki et al discloses, as stated in the last Office Action, a playback apparatus for extracting a playback signal from a recording medium without

Art Unit: 2621

performing tracking control (Fig. 4 and col. 3, lines 21-29), said playback apparatus comprising: an adaptive equalizing circuit (filter 14 of Fig. 4, col. 5, lines 31-33) for performing equalization of said playback signal; and detection means (an envelope detector 19 of Fig. 4, from col. 8, line 59 to col. 9, line 13) for determining an envelope value of said playback signal, wherein said adaptive equalizing circuit is controlled in accordance with an envelope value from said detection means.

However, Seki et al does not specifically discloses the claimed phase-locked loop means responsive to said playback signal to control said adaptive equalizing circuit when a phase of a clock generated by the phase-locked loop means is locked to the playback signal, wherein said phase-locked loop means generates a detection signal indicating whether the phase of said clock is locked to the playback signal.

Shim et al. teaches that the waveform equalizer 12 and the Viterbi decoder 13 are controlled by the phase locked loop 15 so that the damaged signal reproduced from the recording medium can be restored (col. 1, lines 17-38) and that PLLOCK, a clock synchronization signal out put form PLL 23, detects whether the phase of the clock is locked to the playback signal (col. 5, lines 31-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the PLL as taught by Shim et al into Seki et al's system in order to increase the quality of the reproduced video signal by restoring the damaged reproduced video signal.

7. Regarding claim 2, Seki et al also discloses the claimed wherein said adaptive equalizing circuit (Fig. 2) comprises: a plurality of unit delay means (delay elements

Art Unit: 2621

21a, 21b, 21c, and 21d of Fig. 2, col. 6, lines 42-45) for delaying said playback signal in sequence; a plurality of weighting means (coefficient multipliers 22a, 22b, 22c, 22d, and 22e of Fig. 2, col. 6, lines 45-49) for performing weighting on each of the delay signals; and additional means (adder 23a of Fig. 2, col. 6, lines 49-56) for adding together the weighted signals, and wherein each of the weighting signals of said plurality of weighting means is changed in accordance with said playback signal, and when the envelope value of said playback signal is more than or equal to a predetermined value, the coefficients in said weighting means are changed (an envelope detector 19 of Fig. 4, from col. 8, line 59 to col. 9, line 13).

8. Regarding claim 3, Shim also discloses the claimed wherein said phase-locked loop means is used for forming a signal locked to an arbitrary phase of said playback signal, such that when phase lock has been performed by said phase-locked loop means, the coefficients in said weighting means are changed (col. 1, lines 17-38).

9. Claims 4-8 are rejected for the same reasons as discussed in apparatus claims 1-3 above.

10. Regarding claim 9, Seki et al discloses the claimed wherein said phase-locked loop means extracts a data clock from said playback signal only when the envelope value of said playback signal is at least equal to a predetermined value (an envelope detector 19 of Fig. 4, from col. 8, line 59 to col. 9, line 13).

11. Claims 10 and 11 are rejected for the same reasons as discussed in claim 9 above.

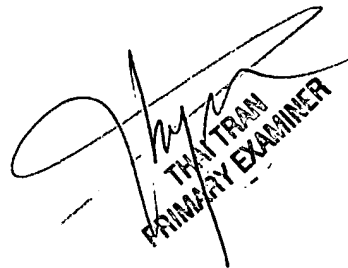
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mishawn N. Dunn whose telephone number is 571-272-7635. The examiner can normally be reached on Monday - Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mishawn Dunn
April 17, 2006


THAI TRAN
PRIMARY EXAMINER